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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/605,123 | 09/10/2003 | Dieter Maisch | P7186.3US | 2122 |
| 30008 | 7590 | 02/01/2005 | EXAMINER | |
| GUDRUN E. HUCKETT DRAUDT LONSSTR. 53 WUPPERTAL, 42289 GERMANY | | | PANG, ROGER L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3681 | |

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/605,123

Applicant(s)

MAISCH ET AL.

Examiner

Roger L Pang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 16, 18 and 27-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-15, 17, 19-26 and 30-34 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The following action is in response to communications filed for application 10/605,123 on December 10, 2004.

Election/Restrictions

Claims 16, 18, and 27-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 10, 2004.

Applicant argues that some of the embodiments are similar enough to the elected species to examine. Although structurally, they may be similar, their functional limitations are different, and would require additional consideration. Applicant's arguments have been considered, but are not persuasive.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the shift fork must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation of "the engagement member" lacks antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 13-15, 19-20, 23-26, and 30-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredriksen '861. With regard to claim 1, Fredriksen teaches an actuating device for a transmission of a motor vehicle, the actuating device comprising: a housing 2; two pistons 13a/14a moveably arranged in the housing; a coupling part @ 16 arranged between the

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two pistons and acted on by the two pistons so as to be moved by the two pistons, wherein the coupling part is configured to connect to a shifting part 11 of the transmission and is comprised, at least on a surface of the coupling part, of a material; wherein the two pistons are loosely seated on the coupling part. Fredriksen lacks the teaching of the surface of the coupling part being made of a wear-resistant material. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen to employ wear-resistant material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. With regard to claim 2, Fredriksen teaches the device, wherein the two pistons are identical (Fig. 3). With regard to claim 13, Fredriksen teaches the device, but lacks the specific teaching of said coupling part being monolithic. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen to employ a monolithic coupling part, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 US 164 (1893). With regard to claim 14, Fredriksen teaches the device, but lacks the teaching of said coupling part being made of steel. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen to employ a steel coupling part, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. With regard to claim 15, Fredriksen teaches the device, wherein the two pistons are sleeve-shaped or annular (Fig. 3). With regard to claim 19, Fredriksen teaches the device, wherein the coupling part has two flanges (formed by opposite

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sides @ 16) and wherein the two pistons rest, at least when under pressure load, against one of the two flanges, respectively. With regard to claim 20, Fredriksen teaches the device, wherein the housing has a through opening through which through opening the shifting part passes into the housing (Fig. 3). With regard to claims 23-26, Fredriksen teaches the devices, but lacks the teaching of said pistons or housing being made of a light metal or aluminum. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen to employ aluminum pistons or housing, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. With regard to claim 30, Fredriksen teaches the device, wherein the housing has a first end formed by a bottom (Fig. 3) and a second formed by a cover (5a of Fig. 7). With regard to claim 31, Fredriksen teaches the device, wherein the first piston is arranged adjacent the bottom, and the second piston is arranged adjacent the cover, wherein the first piston and the bottom define a first pressure chamber 6, and wherein the second piston and the cover define a second pressure chamber 5. With regard to claim 32, Fredriksen teaches the device, wherein the device is a hydraulic actuator or a pneumatic actuator (Fig. 3). With regard to claim 33, Fredriksen teaches the device, but lacks the teaching wherein the wear-resistant material is steel. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen to employ steel as the wear-resistant material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. With regard to claim 34, Fredriksen teaches the device, wherein the shifting part is a shift fork 11.

Claims 4-12, 17, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fredriksen as applied to claims 1 and 20 above, and further in view of Vilou. With regard to claim 4, Fredriksen teaches the device, but lacks the teaching wherein the coupling part comprises an engagement member for the shifting part. Vilou teaches a coupling part 2b with an engagement member (Fig. 3) for a shifting part 13. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen to employ an engagement part in view of Vilou, in order to improve ease of assembly. With regard to claim 5, Fredriksen and Vilou teach the device, wherein the engagement member has axial projections (Fred: 9/10) and wherein the two pistons are loosely mounted on the axial projections (Fig. 3). With regard to claim 6, Fredriksen and Vilou teach the device, wherein the axial projections are aligned relative to one another (Fig. 3). With regard to claim 7, Fredriksen and Vilou teach the device, wherein the axial projections have identical length (Fig. 3). With regard to claim 8, Fredriksen and Vilou teach the device, wherein the engagement member is located at half the length of the coupling part (Fred: @ 16). With regard to claim 9, Fredriksen and Vilou teach the device, wherein the engagement member has at least one groove to be engaged by the shifting part (Vilou: Fig. 3). With regard to claim 10, Fredriksen and Vilou teach the device, wherein the coupling part has two flanges, and wherein the groove is axially limited by the two flanges (Vilou: Fig. 3). With regard to claim 11, Fredriksen and Vilou teach the device, wherein the engagement member has axial projections (Fred: 9/10), wherein the two pistons are loosely mounted on the axial projection (Fig. 3), and wherein the axial projections project perpendicularly from the flanges (Fig. 3 @ 16). With regard to claim 12, Fredriksen and Vilou teach the device, wherein an outer diameter of the flanges is smaller than an inner diameter of the

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housing [Fred: Fig. 3 (flanges of Vilou must fit within the housing to operate as the sides of 16 of Fredriksen)]. With regard to claim 17, see rejection of claims 4 and 5. With regard to claim 21, see rejection of claim 4. Fredriksen and Vilou lack the specific teaching of the opening in the housing 2b matching the approximate axial width of the engagement member. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen in view of Vilou to employ an axial opening approximately the axial width of the engagement member, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA). With regard to claim 22, see rejection of claim 5. Fredriksen and Vilou lack the teaching wherein the maximum stroke of the coupling part is smaller than a guide length of the axial projections in the two pistons. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fredriksen in view of Vilou to employ a maximum stroke of the coupling part is smaller than a guide length of the axial projections in the two pistons, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA).

Allowable Subject Matter

Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sibeud, Semke, Tuji, Fukui, Adler, and Ishida have been cited to show similar actuators.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check.

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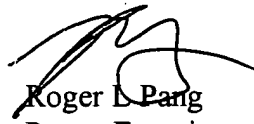
If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roger L Pang whose telephone number is 703-305-0445 (571-272-7095 post move to Alexandria). The examiner can normally be reached on 5:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Roger L. Pang
Patent Examiner
Art Unit 3681

January 27, 2005